

We claim:

- 1        1.     Floor covering, comprising:
  - 2              a woven fabric top layer,
  - 3              a backing layer positioned below the fabric top layer, and
  - 4              a backing fabric below the backing layer.
- 1        2.     The floor covering of claim 1, further comprising a reinforcement web under the backing layer.
- 1        3.     The floor covering of claim 1, in which the woven fabric top layer is woven on a jacquard loom.
- 1        4.     The floor covering of claim 3, in which the woven fabric comprises polyester yarn.
- 1        5.     The floor covering of claim 4, in which the polyester is selected from the group of polyethylene terephthalate, polybutylene terephthalate, poly(trimethylene terephthalate), poly(1,4-dimethylenecyclohexane terephthalate), poly(ethylene 2,6-naphthalene-dicarboxylate), and polylactic acid.
- 1        6.     The floor covering of claim 3, in which the woven fabric top layer comprises yarn of 600 to 3600 denier (total yarn denier) having 8 to 80 denier per filament.
- 1        7.     The floor covering of claim 6, in which yarn in the woven fabric top layer comprises yarns of 600 and 2400 total yarn denier having 20 denier per filament.

1           8.     The floor covering of claim 4, in which the polyester yarn comprises  
2     PTT yarn.

1           9.     The floor covering of claim 1, further comprising a precoat layer  
2     between the woven fabric top layer and the backing layer.

1           10.    The floor covering of claim 9, in which the precoat comprises highly  
2     frothed ethylene vinyl acetate or acrylic latex.

1           11.    The floor covering of claim 10, wherein the precoat is formed by  
2     applying a highly frothed ethylene vinyl acetate or acrylic latex to the underside of  
3     the woven fabric top layer.

1           12.    The floor covering of claim 11, in which the precoat further  
2     comprises an antimicrobial.

1           13.    The floor covering of claim 12, in which the antimicrobial comprises  
2     a phosphorus amine antimicrobial.

1           14.    The floor covering of claim 9, in which the precoat comprises a base  
2     latex, water, a foaming agent, thickener and flame retardant.

1           15.    The floor covering of claim 9, in which the precoat further comprises  
2     an antimicrobial.

1           16.    The floor covering of claim 1, further comprising a fabric stabilizing  
2     layer adjacent to the fabric top layer.

1        17.    The floor covering of claim 16, in which the fabric stabilizing layer  
2    comprises a web of non-woven fiberglass fleece.

1        18.    The floor covering of claim 1, in which the backing fabric comprises  
2    woven polypropylene carpet backing.

1        19.    The floor covering of claim 1, further comprising a resilient layer  
2    positioned between the fabric top layer and the backing layer.

1        20.    The floor covering of claim 19, in which the backing layer is  
2    urethane-modified bitumen.

1        21.    The floor covering of claim 20, in which the backing layer weighs  
2    between approximately 10 and 60 ounces per square yard.

1        22.    The floor covering of claim 2, further comprising a resilient layer  
2    between the backing layer and the backing fabric.

1        23.    The floor covering of claim 22, in which the resilient layer comprises  
2    polyurethane foam.

1        24.    The floor covering of claim 2, in which the reinforcement web  
2    comprises non-woven fiberglass fleece.

1        25.    The floor covering of claim 24, in which the fiberglass fleece weighs  
2    approximately 1.3 ounces per square yard.

1        26.    Floor covering comprising:  
2              (a)    a woven fabric top layer comprising polyester yarn,

- 3 . . . . . (b) a layer of urethane modified bitumen below the fabric top  
4 layer,  
5 . . . . . (c) a layer of polyurethane foam below the layer of urethane-  
6 modified bitumen,  
7 . . . . . (d) a fiberglass fleece web positioned generally between the  
8 urethane modified bitumen and the polyurethane foam, and  
9 . . . . . (e) a web of woven polypropylene carpet backing below the  
10 polyurethane foam.

1           27. The floor covering of claim 26, further comprising a latex precoat  
2 containing an antimicrobial on the underside of the woven fabric top layer.

1        28. A method for producing floor covering, comprising the steps of:

2                (a) weaving a face fabric on a loom,

3                (b) forming a layer of resilient material,

4                (c) bonding the resilient layer to a web of backing fabric,

5                (d) forming a backing layer,

6                (e) positioning a reinforcement web between the backing layer and

7        the resilient layer,

8                (f) bonding the backing layer and resilient layer together with the

9        reinforcement web between the backing and resilient layers, and

10              (g) bonding the face fabric to the backing layer.

1            29. The method for producing floor covering of claim 28, in which the  
2 face fabric is woven on a jacquard loom.

1           30. The method for producing floor covering of claim 28, in which the  
2 resilient material comprises polyurethane foam.

1           31.     The method for producing floor covering of claim 28, in which the  
2     backing fabric comprises woven polypropylene.

1           32.     The method for producing floor covering of claim 28, in which the  
2     backing layer comprises urethane modified bitumen.

1           33.     The method for producing floor covering of claim 28, in which the  
2     reinforcement web comprises nonwoven fiberglass fleece.

1           34.     The method for producing floor covering of claim 28, further  
2     comprising the step of applying a precoat to the face fabric before bonding the face  
3     fabric to the backing layer.

1           35.     The method for producing floor covering of claim 34, further  
2     comprising the step of incorporating an antimicrobial in the precoat.

1           36.     A method for providing a continuous floor covering on a floor  
2     comprising the steps of:

3               (a)     positioning on the floor sections of floor covering completely  
4     covering the floor area to be covered, the floor covering comprising a woven fabric  
5     top layer, a bottom layer of woven polypropylene carpet backing, and at least one  
6     layer between the woven fabric top layer and the woven polypropylene carpet  
7     backing,

8               (b)     cutting the floor covering so that edges of adjacent sections of  
9     floor covering are abutting,

10              (c)     applying adhesive between the underside of the carpet sections  
11     and the floor,

12              (d)     applying fabric edge sealer to adjacent fabric top layer edges,

13                         (e) applying carpet seam sealer to at least adjacent carpet backing  
14 edges, and  
15                         (g) with the floor covering sections positioned on the floor with  
16 edges positioned in abutting relationship, permitting the adhesive, seam sealer and  
17 fabric edge sealer to cure.

1                         37. The method for providing a continuous floor covering of 36, in which  
2 the fabric edge sealer is a polyester urethane.